Load Banks

LB Series
LBR | LBP | LBS | LBT
Load Banks
LB Series

Aktif Load Banks are produced according to the following customer demands, in performance tests of Electrical Machines and as Dummy Loads to ensure safe operation of Generators.

- AC / DC Electrical characteristics
- R, L, C Load characteristics
- Sensitive stage precision
- Manual / HMI / Automatic control
- Indoor / Outdoor installation alternatives
- Rack mounted / Portable / Stationary / Semitrailer alternatives

Application Areas
- Generator Manufacturing and Services
- UPS Manufacturing and Services
- Dummy Loads for Gensets
- Power and Thermal Simulation of Data Centers
- Alternator Tests of Military Vehicles
- Battery Discharge Tests
- Inverter Performance Tests
- Manufacturing of EV Charging Stations

Electrical Specifications
Load Banks can be manufactured for AC LV/HV or DC operating voltages; based on following characteristics.

- Resistive (kW - Cos φ:1)
- Inductive / Capacitive (kVAr)
- Resistive + Inductive (kVA - Cos φ as requested)
- Resistive + Inductive + Capacitive (kVA - Cos φ: as requested)
- AC (50 / 60 / 400 Hz) or DC working voltage
- 1 kW / kVAr / kVA step precision at AC as according to needs
- 1 A step precision at DC as according to needs
- 3 kV, 50 / 60 Hz, 1 min Insulation level for the power circuit
- 2 kV, 50 / 60 Hz, 1 min Insulation level for the control circuit
- Special designs for different frequency and Cos φ values
- Single or three phase fans as according to needs

Standards
- IEC 60664-1
- IEC 60529
- IEC 60071-1
Physical Properties

- Load Banks can be manufactured in different protection levels.
  - IP20 for indoor use
  - IP20 for outdoor use under shelter
  - IP23 for outdoor use on open area or different
- Load banks are manufactured portable up to 100 kW.
- Load banks up to 500 kW are manufactured with wheels, on request.
- Over than 500 kW load banks are usually stationary.
- Load banks can be installed on a trailer and transported by a vehicle on demand.
- There are two types of load banks according to cooling direction.
  - Horizontal air flow
  - Vertical air flow

Protections

The following protection measures can be taken in load banks and switching is allowed only when there is no safety issue.

- Over current
- Over temperature
- Over voltage and low voltage
- Contact sticking
- Fan blowing error and more

Load Specifications

- The resistor material for resistive loads is stainless steel wire which has low temperature coefficient.
- Resistive load resistors provide a large cooling surface for forced cooling.
- Inductive loads are manufactured with aluminium or copper conductor, low losses, and iron core.

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<tr>
<th>Load Banks Control Types &amp; Features</th>
<th>N0</th>
<th>N1</th>
<th>N2</th>
<th>N3</th>
<th>N4</th>
<th>N5</th>
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✓ : Standard   o : Optional   - : Not Available

Trailer Specifications

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<tr>
<th>Type</th>
<th>Dimensions [mm]</th>
<th>Max. Gross Weight [kg]</th>
<th>Class</th>
<th>Axles Type</th>
<th>Axles Number</th>
<th>Drawbar Type</th>
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